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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,056	06/20/2001	Robert Jacob von Gutfeld	YOR920000825	2691

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EXAMINER

HARAN, JOHN T

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 09/11/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/884,056

Applicant(s)

VON GUTFELD ET AL.

Examiner

John T. Haran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9,12-16 and 18-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9,12-16 and 18-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on 8/19/03. The double-patenting and 102 rejections have been withdrawn in light of the amendments to the claims.

Specification

2. The disclosure is objected to because of the following informalities: The amendment to the specification at line 14 still has a missing application number which needs to be inserted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15, 19-20, 22, 24-25, and 30-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 12, 15, 19, and 22 are indefinite because they require a radiation diffuser that comprises a removable tape and a coupler for attaching the radiation diffuser to a first substrate. The claim language indicates that the coupler and diffuser (removable tape) are two separate components however the specification appears to indicate that when the diffuser is a removable tape there is no separate coupler because the removable tape itself includes pressure sensitive adhesive. The

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specification appears to teach five embodiments for attaching a diffuser to a substrate:

(1) an adhesive tape with scattering centers which is directly attached to a substrate (see page 12); (2) a material such as the glass taught in U.S. Patent 6,284,087 with a matte finish which is attached to the substrate with a double sided adhesive tape (see page 13); (3) an adhesive tape with a matte surface such as 3M 6200 which is directly attached to a substrate (see page 13); (4) a polymer sheet that is pressure sensitive adhesive and has a hologram formed on one side that is directly attached to a substrate (see page 14); and (5) a grating tape, which is silent towards whether it is adhesive, but presumably is since it is called a tape so there is no need for a separate couplant to attach it to a substrate (page 7). Of the five embodiments only (1), (3), and (5) are removable tapes and none needs a separate couplant to attach it to a substrate since they all are adhesive. This is furthermore exemplified in claims 30 and 32 which specify that the removable tapes comprise a pressure sensitive adhesive. It is unclear why the claims refer to a separate coupler when the specification clearly indicates that all embodiments with the radiation diffuser as a tape are adhesive and do not require a separate coupler. It is suggested to amend the claims to remove the term "coupler" from the claims and to specify that the removable tape is adhesive and attaches the removable tape to the first substrate.

Claims 2-3, 19-20, 22, and 30-33 will need to be accordingly amended with the elimination of the term "coupler" and specification that the removable tape is adhesive.

Claims 7-8 are indefinite because claim 1 specifies that the radiation diffuser is a removable tape and therefore it can not be a polymer sheet.

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Claims 24-25 are indefinite because claim 18 specifies that the radiation diffuser is a removable tape and therefore it can not be a polymer sheet.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9, 12-16 and 18-39 are rejected under 35 U.S.C. 103(a) as being obvious over the admitted prior art in view of Von Gutfeld et al (U.S. Patent 6,284,087).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). **For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of**

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the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

The admitted prior art teaches a system and a method of sealing a first substrate to a second substrate wherein a first substrate having both transparent and alternating opaque and transparent regions with respect to incident electromagnetic radiation is affixed to a second substrate with a polymer by curing the polymer with electromagnetic radiation such as ultraviolet light (See Figure 1; page 14, line 17 to page 15, line 14). The system and method of the admitted prior art result in a shadowing effect because the polymer under the opaque regions is not cured because the opaque regions block the ultraviolet radiation from reaching the polymer underneath.

Von Gutfeld et al teaches a similar system and method of sealing a first substrate with transparent and opaque regions to a second substrate with a polymer that avoids the shadowing effect by coupling a glass sheet with an upper face prepared as a diffuse reflector, such as a matte finish or hologram (radiation diffuser) with a couplant such as water or grease to attach the glass plate to the first substrate. When ultraviolet radiation is directed at the radiation diffuser it diffuses (redirects) the ultraviolet light so that it reaches the polymer under the opaque regions thereby curing the entire polymer and eliminating the shadowing effect (See Figure 6; Column 2, lines 31-36; and Column 4, line 62 to Column 5, line 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the radiation diffuser and couplant in

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the system and method of the admitted prior art in order to avoid the shadowing effect as suggested in Von Gutfeld et al.

Furthermore one skilled in the art would have readily appreciated that a removable adhesive tape with a matte finish on one surface are known, as taught in the admitted prior art (Spec page 13, lines 18-20), would be an alternative expedient to the transparent plate with a matte finish and couplant taught in Von Gutfeld because it serves the same function to attach the diffuser to a substrate and to spread ultraviolet light in an angular direction. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a known alternative such as a removable adhesive tape in the method of the admitted prior art, as modified above, in place of the transparent plate with a matte finish and couplant.

Regarding claims 2-9 and 20-26, and 30-39 one skilled in the art would have readily appreciated tape with a matte finish and pressure sensitive adhesive, hologram imprinted polymer sheets with pressure sensitive adhesive, and grating tapes are all known and that they are functional equivalents and alternate expedients to the transparent plate and couplant of Von Gutfeld et al. It would have been obvious to use known alternate expedients and functional equivalents in the method of the admitted prior art, as modified above, for the radiation diffuser.

Response to Arguments

7. Applicant's arguments filed 8/19/03 have been fully considered but they are not persuasive with regards to the rejection of Claims 1-9, 12-16 and 18-39 as being obvious over the admitted prior art in view of Von Gutfeld et al (U.S. Patent 6,284,087).

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One skilled in the art would have readily appreciated that a removable adhesive tape with a matte finish on one surface are known, as taught in the admitted prior art (Spec page 13, lines 18-20), would be an alternative expedient to the transparent plate with a matte finish and couplant taught in Von Gutfeld because it serves the same function to attach the diffuser to a substrate and to spread ultraviolet light in an angular direction. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a known alternative such as a removable adhesive tape in the method of the admitted prior art, as modified above, in place of the transparent plate with a matte finish and couplant.

Allowable Subject Matter

8. It is noted that if Applicant were to assert common ownership or assignment of the present application and U.S. Patent 6,284,087 at the time the application was filed, as suggested above, U.S. Patent 6,284,087 would no longer be available as a reference and there would be no art rejection against the claims. If Applicant were to additionally amend the claims to resolve the 112, second paragraph issues then the claims would be in condition for allowance.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(703) 305-0052**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


John T. Haran


Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700